



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/650,146	08/27/2003	Messay Amerga	020670	7089
<div>23696 7590 10/01/2007</div> <div>QUALCOMM INCORPORATED</div> <div>5775 MOREHOUSE DR.</div> <div>SAN DIEGO, CA 92121</div>				
			<div>EXAMINER</div> <div>NGUYEN, TU X</div>	
			<div>ART UNIT</div> <div>2618</div>	<div>PAPER NUMBER</div>
			<div>NOTIFICATION DATE</div> <div>10/01/2007</div>	<div>DELIVERY MODE</div> <div>ELECTRONIC</div>

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

us-docketing@qualcomm.com
kaskanla@qualcomm.com
nanm@qualcomm.com

Office Action Summary

Application No.

10/650,146

Applicant(s)

AMERGA ET AL.

Examiner

Tu X. Nguyen

Art Unit

2618

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 August 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

Applicant's arguments, dated 8/29/07, with respect to claims 1-18 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jeong et al. (US Patent 7,089,004) in view of Haumount et al. (US Pub. 2002/0032032).

Regarding claims 1, 4 and 18, Jeong et al. disclose an apparatus, comprising a searcher for:

detecting a plurality of cells to form a ranked list of monitored cells (see col.11 lines 4-5);

searching each cell from a first list of cells during each of a series of cycles (see col.10 line 65 through col.11 line 1); and

searching each cell from a subset of a second list of cells during each of the series of cycles (see col.11 lines 2-4); and

a processor (see col.6 lines 58-60) for:
ranking the list of monitored cells to form a ranked list of monitored cells (see col.11 line 1);
selecting the first list of cells from the ranked list of monitored cells (see col.11 lines 2-3); and

selecting the subset of the second list of cells, the second list of cells comprising the remaining cells from the ranked list of monitored cells not selected in the first list of cells (see col.11 lines 2-3), and the selected subset varying during each cycle (see col.11 lines 2-20).

Jeong et al. disclose ranking the list of monitored cells; however, Jeong et al. fail to disclose determined from the strength of a strongest cell.

Haumount et al. disclose determined from the strength of a strongest cell (see par.013). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Jeong et al. with the above teaching of Haumount et al. in order select the strongest signals which can provide better interference reduction.

Regarding claims 2 and 5, the modified Jeong et al. disclose the processor further: compares the number of cells in the list of monitored cells to a pre-determined search number; and wherein: the ranking, selecting the first list, and selecting the subset of the second list is performed when the number of cells in the monitored list is greater than the pre-determined search number (see Jeong, col.10 lines 38-40).

Regarding claims 3 and 6, the modified Jeong et al. disclose the processor directs the searcher to search each cell in the list of monitored cells when the number of cells in the

monitored list is less than or equal to the pre-determined search number (see Jeong, col.10 lines 45-50).

Regarding claim 7, the modified Jeong et al. disclose each subset selected from the second list is selected in round-robin fashion (see Jeong, col.2 lines 24-26).

Regarding claim 9, the modified Jeong et al. disclose the detecting step is repeated with a minimum frequency according to one or more pre-determined refresh parameters (see Jeong, col.8 lines 5-25).

Regarding claim 8, the modified Jeong et al. disclose the cells are ranked in decreasing order of measured signal strength (see Jeong, col.9 lines 38-39, it is inherent that the cells which have strong signals are in list of active cell and the less strong signal are in the remaining lists).

Regarding claims 10 and 14, the modified Jeong et al. disclose the detecting step comprises one or more search types (see Jeong, col.7 lines 44-45).

Regarding claims 11 and 15, the modified Jeong et al. disclose the detecting step comprises intra-frequency searching (see Jeong, col.7 lines 44-45).

Regarding claims 13, 16-17, the modified Jeong et al. disclose the detecting step comprises inter-frequency searching (see Jeong, col.7 lines 44-45).

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tu Nguyen whose telephone number is 571-272-7883.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward Urban, can be reached at (571) 272-7899. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



September 17, 2007